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June 28, 2018

VIA ELECTRONIC FILING

The Honorable Jocelyn G. Boyd
Chief Clerk/Administrator
Public Service Commission of South Carolina
101 Executive Center Drive, Suite 100
Columbia, South Carolina 29210

Re: **Duke Energy Progress, LLC – Monthly Power Plant Performance
Report
Docket No. 2006-224-E**

Dear Ms. Boyd:

Pursuant to the Commission's Orders in Docket No. 1977-354-E, enclosed for filing is the Monthly Power Plant Performance Report in Docket No. 2006-224-E for the month of May 2018.

Should you have any questions regarding this matter, please do not hesitate to contact me at 803.988.7130.

Sincerely,

Rebecca J. Dulin

Enclosure

cc: Ms. Dawn Hipp, Office of Regulatory Staff
Mr. Jeffrey M. Nelson, Office of Regulatory Staff
Ms. Shannon Bowyer Hudson, Office of Regulatory Staff
Ms. Nanette Edwards, Office of Regulatory Staff
Michael Seaman-Huynh, Office of Regulatory Staff
Ms. Heather Shirley Smith, Duke Energy
Mr. Scott Elliott, Elliott & Elliott, P.A.
Mr. Garrett Stone, Brickfield, Burchette, Ritts & Stone, PC
Mr. Gary Walsh, Walsh Consulting, LLC

Duke Energy Progress
Base Load Power Plant Performance Review Plan

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Period: May, 2018

Station	Unit	Date of Outage	Duration of Outage	Scheduled / Unscheduled	Cause of Outage	Reason Outage Occurred	Remedial Action Taken
Brunswick	1	None					
	2	None					
Harris	1	04/07/2018 - 05/10/2018	237.65	Scheduled	End-of-cycle 21 refueling outage	Scheduled refueling outage	Completed refueling outage
Robinson	2	None					

**Duke Energy Progress
Base Load Power Plant
Performance Review Plan
May 2018**

Lee Energy Complex

Unit	Duration of Outage	Type of Outage	Cause of Outage		Reason Outage Occurred	Remedial Action Taken
1A	5/26/2018 1:27:00 PM To 5/26/2018 7:49:00 PM	Unsch	5050	Gas Turbine - Ignition System	Ignitor failure; Replaced faulty ignitor	
1A	5/29/2018 2:05:00 PM To 5/31/2018 12:07:00 AM	Unsch	4609	Other Exciter Problems	Collector blower motor failures on both blowers Retired unit normally to make repairs	
ST1	5/9/2018 9:04:00 PM To 5/11/2018 6:00:00 PM	Unsch	4445	Steam Reheater	Cold reheat safety valve issues	

Richmond County Station

Unit	Duration of Outage	Type of Outage	Cause of Outage		Reason Outage Occurred	Remedial Action Taken
9	5/23/2018 4:17:00 PM To 5/23/2018 10:18:00 PM	Unsch	5285	Gas Turbine Vibration	U9 trip #2 exhaust Y probe vibration	

Sutton Energy Complex

Unit	Duration of Outage	Type of Outage	Cause of Outage		Reason Outage Occurred	Remedial Action Taken
1A	4/14/2018 2:26:00 AM To 5/13/2018 10:34:00 PM	Sch	5260	Major Gas Turbine Overhaul	Hot gas path outage	
1A	5/27/2018 1:00:00 PM To 5/30/2018 1:00:00 AM	Sch	5150	Gas Turbine - Turning Gear and Motor	Broken shear pin in turning gear	
1B	4/14/2018 12:00:00 AM To 5/17/2018 10:49:00 AM	Sch	5260	Major Gas Turbine Overhaul	Hot gas path outage	
ST1	4/14/2018 1:40:00 AM To 5/20/2018 10:20:00 AM	Sch	5270	Gas Turbine - Hot End Inspection	Spring outage boroscope inspection of CT's	
ST1	5/27/2018 1:22:00 AM To 5/27/2018 1:57:00 PM	Sch	6134	Other Main Steam Valves (including Vent and Drain)	BOP outage for common header CRH safety pilot valve repair	

Notes:

- Units in commercial operation for the full month are presented. Pre-commercial or partial month commercial operations are not included.

**Duke Energy Progress
Base Load Power Plant Performance Review Plan**

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**May 2018
Brunswick Nuclear Station**

	<u>Unit 1</u>	<u>Unit 2</u>		
(A) MDC (mW)	938	932		
(B) Period Hours	744	744		
(C) Net Gen (mWh) and Capacity Factor (%)	708,628	101.54	690,778	99.62
(D) Net mWh Not Gen due to Full Schedule Outages	0	0.00	0	0.00
* (E) Net mWh Not Gen due to Partial Scheduled Outages	0	0.00	165	0.02
(F) Net mWh Not Gen due to Full Forced Outages	0	0.00	0	0.00
* (G) Net mWh Not Gen due to Partial Forced Outages	-10,756	-1.54	2,465	0.36
* (H) Net mWh Not Gen due to Economic Dispatch	0	0.00	0	0.00
* (I) Core Conservation	0	0.00	0	0.00
(J) Net mWh Possible in Period	697,872	100.00%	693,408	100.00%
(K) Equivalent Availability (%)		99.32		99.98
(L) Output Factor (%)		101.54		99.62
(M) Heat Rate (BTU/NkWh)		10,398		10,719

* Estimate
FOOTNOTE: D and F Include Ramping Losses

**Duke Energy Progress
Base Load Power Plant Performance Review Plan**

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**May 2018
Harris Nuclear Station**

Unit 1

(A) MDC (mW)	932	
(B) Period Hours	744	
(C) Net Gen (mWh) and Capacity Factor (%)	459,520	66.27
(D) Net mWh Not Gen due to Full Schedule Outages	221,490	31.94
* (E) Net mWh Not Gen due to Partial Scheduled Outages	12,398	1.79
(F) Net mWh Not Gen due to Full Forced Outages	0	0.00
* (G) Net mWh Not Gen due to Partial Forced Outages	0	0.00
* (H) Net mWh Not Gen due to Economic Dispatch	0	0.00
* (I) Core Conservation	0	0.00
(J) Net mWh Possible in Period	693,408	100.00%
(K) Equivalent Availability (%)		64.99
(L) Output Factor (%)		97.37
(M) Heat Rate (BTU/NkWh)		10,605

* Estimate

FOOTNOTE: D and F Include Ramping Losses

**Duke Energy Progress
Base Load Power Plant Performance Review Plan**

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**May 2018
Robinson Nuclear Station**

Unit 2

(A) MDC (mW)	741	
(B) Period Hours	744	
(C) Net Gen (mWh) and Capacity Factor (%)	556,891	101.01
(D) Net mWh Not Gen due to Full Schedule Outages	0	0.00
* (E) Net mWh Not Gen due to Partial Scheduled Outages	0	0.00
(F) Net mWh Not Gen due to Full Forced Outages	0	0.00
* (G) Net mWh Not Gen due to Partial Forced Outages	-5,587	-1.01
* (H) Net mWh Not Gen due to Economic Dispatch	0	0.00
* (I) Core Conservation	0	0.00
(J) Net mWh Possible in Period	551,304	100.00%
(K) Equivalent Availability (%)		100.00
(L) Output Factor (%)		101.01
(M) Heat Rate (BTU/NkWh)		10,653

* Estimate

FOOTNOTE: D and F Include Ramping Losses

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**Duke Energy Progress
Base Load Power Plant
Performance Review Plan
May 2018**

Lee Energy Complex

	Unit 1A	Unit 1B	Unit 1C	Unit ST1	Block Total
(A) MDC (mW)	225	227	228	379	1,059
(B) Period Hrs	744	744	744	744	744
(C) Net Generation (mWh)	108,014	115,447	115,858	218,165	557,484
(D) Capacity Factor (%)	64.52	68.36	68.30	77.37	70.76
(E) Net mWh Not Generated due to Full Scheduled Outages	0	0	0	0	0
(F) Scheduled Outages: percent of Period Hrs	0.00	0.00	0.00	0.00	0.00
(G) Net mWh Not Generated due to Partial Scheduled Outages	38,698	42,408	43,152	699	124,957
(H) Scheduled Derates: percent of Period Hrs	23.12	25.11	25.44	0.25	15.86
(I) Net mWh Not Generated due to Full Forced Outages	9,090	0	0	17,030	26,120
(J) Forced Outages: percent of Period Hrs	5.43	0.00	0.00	6.04	3.32
(K) Net mWh Not Generated due to Partial Forced Outages	0	0	0	5,133	5,133
(L) Forced Derates: percent of Period Hrs	0.00	0.00	0.00	1.82	0.65
(M) Net mWh Not Generated due to Economic Dispatch	11,598	11,033	10,622	40,949	74,202
(N) Economic Dispatch: percent of Period Hrs	6.93	6.53	6.26	14.52	9.42
(O) Net mWh Possible in Period	167,400	168,888	169,632	281,976	787,896
(P) Equivalent Availability (%)	71.45	74.89	74.56	91.89	80.17
(Q) Output Factor (%)	69.65	69.27	69.42	85.23	74.87
(R) Heat Rate (BTU/NkWh)	9,541	9,587	9,506	4,142	7,430

Notes:

- Units in commercial operation for the full month are presented. Pre-commercial or partial month commercial operations are not included.
- (R) Includes Light Off BTU's

**Duke Energy Progress
Base Load Power Plant
Performance Review Plan
May 2018**

Richmond County Station

	Unit 7	Unit 8	Unit ST4	Block Total
(A) MDC (mW)	189	189	175	553
(B) Period Hrs	744	744	744	744
(C) Net Generation (mWh)	106,297	104,667	122,448	333,412
(D) Capacity Factor (%)	75.59	74.43	94.05	81.04
(E) Net mWh Not Generated due to Full Scheduled Outages	0	0	0	0
(F) Scheduled Outages: percent of Period Hrs	0.00	0.00	0.00	0.00
(G) Net mWh Not Generated due to Partial Scheduled Outages	26,040	26,784	4,464	57,288
(H) Scheduled Derates: percent of Period Hrs	18.52	19.05	3.43	13.92
(I) Net mWh Not Generated due to Full Forced Outages	0	0	0	0
(J) Forced Outages: percent of Period Hrs	0.00	0.00	0.00	0.00
(K) Net mWh Not Generated due to Partial Forced Outages	0	0	0	0
(L) Forced Derates: percent of Period Hrs	0.00	0.00	0.00	0.00
(M) Net mWh Not Generated due to Economic Dispatch	8,279	9,165	3,288	20,732
(N) Economic Dispatch: percent of Period Hrs	5.89	6.52	2.53	5.04
(O) Net mWh Possible in Period	140,616	140,616	130,200	411,432
(P) Equivalent Availability (%)	81.48	80.95	96.57	86.08
(Q) Output Factor (%)	76.65	76.34	95.84	82.62
(R) Heat Rate (BTU/NkWh)	11,495	11,272	0	7,203

Notes:

- Units in commercial operation for the full month are presented. Pre-commercial or partial month commercial operations are not included.
- (R) Includes Light Off BTU's

**Duke Energy Progress
Base Load Power Plant
Performance Review Plan
May 2018**

Richmond County Station

	Unit 9	Unit 10	Unit ST5	Block Total
(A) MDC (mW)	216	216	248	680
(B) Period Hrs	744	744	744	744
(C) Net Generation (mWh)	119,776	127,849	162,034	409,659
(D) Capacity Factor (%)	74.53	79.56	87.82	80.97
(E) Net mWh Not Generated due to Full Scheduled Outages	0	0	0	0
(F) Scheduled Outages: percent of Period Hrs	0.00	0.00	0.00	0.00
(G) Net mWh Not Generated due to Partial Scheduled Outages	30,996	30,504	0	61,500
(H) Scheduled Derates: percent of Period Hrs	19.29	18.98	0.00	12.16
(I) Net mWh Not Generated due to Full Forced Outages	1,300	0	0	1,300
(J) Forced Outages: percent of Period Hrs	0.81	0.00	0.00	0.26
(K) Net mWh Not Generated due to Partial Forced Outages	0	0	704	704
(L) Forced Derates: percent of Period Hrs	0.00	0.00	0.38	0.14
(M) Net mWh Not Generated due to Economic Dispatch	8,633	2,351	21,774	32,758
(N) Economic Dispatch: percent of Period Hrs	5.37	1.46	11.80	6.47
(O) Net mWh Possible in Period	160,704	160,704	184,512	505,920
(P) Equivalent Availability (%)	79.90	81.02	99.62	87.45
(Q) Output Factor (%)	80.07	79.56	87.82	82.79
(R) Heat Rate (BTU/NkWh)	11,408	11,481	0	6,919

Notes:

- Units in commercial operation for the full month are presented. Pre-commercial or partial month commercial operations are not included.
- (R) Includes Light Off BTU's

**Duke Energy Progress
Base Load Power Plant
Performance Review Plan
May 2018**

Sutton Energy Complex

	Unit 1A	Unit 1B	Unit ST1	Block Total
(A) MDC (mW)	224	224	271	719
(B) Period Hrs	744	744	744	744
(C) Net Generation (mWh)	39,160	44,795	45,093	129,048
(D) Capacity Factor (%)	23.50	26.88	22.36	24.12
(E) Net mWh Not Generated due to Full Scheduled Outages	83,007	88,439	129,786	301,232
(F) Scheduled Outages: percent of Period Hrs	49.81	53.07	64.37	56.31
(G) Net mWh Not Generated due to Partial Scheduled Outages	20,166	18,507	1,325	39,998
(H) Scheduled Derates: percent of Period Hrs	12.10	11.10	0.66	7.48
(I) Net mWh Not Generated due to Full Forced Outages	0	0	0	0
(J) Forced Outages: percent of Period Hrs	0.00	0.00	0.00	0.00
(K) Net mWh Not Generated due to Partial Forced Outages	0	0	8,031	8,031
(L) Forced Derates: percent of Period Hrs	0.00	0.00	3.98	1.50
(M) Net mWh Not Generated due to Economic Dispatch	24,323	14,915	17,388	56,626
(N) Economic Dispatch: percent of Period Hrs	14.59	8.95	8.62	10.59
(O) Net mWh Possible in Period	166,656	166,656	201,624	534,936
(P) Equivalent Availability (%)	38.09	35.83	30.99	34.71
(Q) Output Factor (%)	64.51	70.85	62.77	65.92
(R) Heat Rate (BTU/NkWh)	12,063	11,935	0	7,804

Notes:

- Units in commercial operation for the full month are presented. Pre-commercial or partial month commercial operations are not included.
- (R) Includes Light Off BTU's

**Duke Energy Progress
Intermediate Power Plant Performance
Review Plan
May 2018**

Mayo Station

Unit 1

(A)	MDC (mW)	746
(B)	Period Hrs	744
(C)	Net Generation (mWh)	147,311
(D)	Net mWh Possible in Period	555,024
(E)	Equivalent Availability (%)	59.69
(F)	Output Factor (%)	42.65
(G)	Capacity Factor (%)	26.54

Notes:

- Units in commercial operation for the full month are presented. Pre-commercial or partial month commercial operations are not included.

**Duke Energy Progress
Intermediate Power Plant Performance
Review Plan
May 2018**

	Roxboro Station		
	Unit 2	Unit 3	Unit 4
(A) MDC (mW)	673	698	711
(B) Period Hrs	744	744	744
(C) Net Generation (mWh)	239,102	72,240	-2,385
(D) Net mWh Possible in Period	500,712	519,312	528,984
(E) Equivalent Availability (%)	94.12	38.24	0.00
(F) Output Factor (%)	54.89	40.05	0.00
(G) Capacity Factor (%)	47.75	13.91	0.00

Notes:

- Units in commercial operation for the full month are presented. Pre-commercial or partial month commercial operations are not included.

Duke Energy Progress
Base Load Power Plant Performance Review Plan

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June 2017 - May 2018
Brunswick Nuclear Station

Unit 1

Unit 2

(A) MDC (mW)	938		932	
(B) Period Hours	8760		8760	
(C) Net Gen (mWh) and Capacity Factor (%)	7,332,062	89.23	8,007,143	98.07
(D) Net mWh Not Gen due to Full Schedule Outages	733,172	8.92	0	0.00
* (E) Net mWh Not Gen due to Partial Scheduled Outages	129,559	1.58	35,976	0.44
(F) Net mWh Not Gen due to Full Forced Outages	58,391	0.71	33,117	0.41
* (G) Net mWh Not Gen due to Partial Forced Outages	-36,304	-0.44	88,084	1.08
* (H) Net mWh Not Gen due to Economic Dispatch	0	0.00	0	0.00
* (I) Core Conservation	0	0.00	0	0.00
(J) Net mWh Possible in Period	8,216,880	100.00%	8,164,320	100.00%
(K) Equivalent Availability (%)		89.35		98.43
(L) Output Factor (%)		98.74		98.47
(M) Heat Rate (BTU/NkWh)		10,459		10,742

* Estimate

FOOTNOTE: D and F Include Ramping Losses

Duke Energy Progress
Base Load Power Plant Performance Review Plan

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June 2017 - May 2018
Harris Nuclear Station

Unit 1

(A) MDC (mW)	932	
(B) Period Hours	8760	
(C) Net Gen (mWh) and Capacity Factor (%)	7,268,757	89.26
(D) Net mWh Not Gen due to Full Schedule Outages	756,318	9.29
* (E) Net mWh Not Gen due to Partial Scheduled Outages	118,314	1.45
(F) Net mWh Not Gen due to Full Forced Outages	146,239	1.80
* (G) Net mWh Not Gen due to Partial Forced Outages	-145,856	-1.80
* (H) Net mWh Not Gen due to Economic Dispatch	0	0.00
* (I) Core Conservation	0	0.00
(J) Net mWh Possible in Period	8,143,772	100.00%
(K) Equivalent Availability (%)		87.14
(L) Output Factor (%)		100.35
(M) Heat Rate (BTU/NkWh)		10,603

* Estimate
 FOOTNOTE: D and F Include Ramping Losses

**Duke Energy Progress
Base Load Power Plant Performance Review Plan**

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**June 2017 - May 2018
Robinson Nuclear Station**

Unit 2

(A) MDC (mW)	741	
(B) Period Hours	8760	
(C) Net Gen (mWh) and Capacity Factor (%)	6,767,659	104.26
(D) Net mWh Not Gen due to Full Schedule Outages	0	0.00
* (E) Net mWh Not Gen due to Partial Scheduled Outages	9,100	0.14
(F) Net mWh Not Gen due to Full Forced Outages	0	0.00
* (G) Net mWh Not Gen due to Partial Forced Outages	-285,599	-4.40
* (H) Net mWh Not Gen due to Economic Dispatch	0	0.00
* (I) Core Conservation	0	0.00
(J) Net mWh Possible in Period	6,491,160	100.00%
(K) Equivalent Availability (%)		99.86
(L) Output Factor (%)		104.26
(M) Heat Rate (BTU/NkWh)		10,299

* Estimate

FOOTNOTE: D and F Include Ramping Losses

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**Duke Energy Progress
Base Load Power Plant
Performance Review Plan
June, 2017 through May, 2018**

Lee Energy Complex

	Unit 1A	Unit 1B	Unit 1C	Unit ST1	Block Total
(A) MDC (mW)	224	224	225	379	1,052
(B) Period Hrs	8,760	8,760	8,760	8,760	8,760
(C) Net Generation (mWh)	1,440,742	1,446,463	1,455,257	2,843,300	7,185,762
(D) Capacity Factor (%)	73.48	73.69	73.81	85.64	77.98
(E) Net mWh Not Generated due to Full Scheduled Outages	109,461	108,516	115,945	132,069	465,990
(F) Scheduled Outages: percent of Period Hrs	5.58	5.53	5.88	3.98	5.06
(G) Net mWh Not Generated due to Partial Scheduled Outages	259,539	260,518	259,843	73,330	853,230
(H) Scheduled Derates: percent of Period Hrs	13.24	13.27	13.18	2.21	9.26
(I) Net mWh Not Generated due to Full Forced Outages	9,688	2,913	3,089	17,030	32,720
(J) Forced Outages: percent of Period Hrs	0.49	0.15	0.16	0.51	0.36
(K) Net mWh Not Generated due to Partial Forced Outages	0	0	0	9,571	9,571
(L) Forced Derates: percent of Period Hrs	0.00	0.00	0.00	0.29	0.10
(M) Net mWh Not Generated due to Economic Dispatch	141,296	144,425	137,461	244,741	667,923
(N) Economic Dispatch: percent of Period Hrs	7.21	7.36	6.97	7.37	7.25
(O) Net mWh Possible in Period	1,960,726	1,962,835	1,971,595	3,320,040	9,215,196
(P) Equivalent Availability (%)	80.68	81.05	80.77	93.01	85.23
(Q) Output Factor (%)	78.68	78.53	79.04	90.03	82.86
(R) Heat Rate (BTU/NkWh)	9,088	9,112	9,042	4,415	7,235

Notes:

- Units in commercial operation for the full month are presented. Pre-commercial or partial month commercial operations are not included.
- (R) Includes Light Off BTU's

**Duke Energy Progress
Base Load Power Plant
Performance Review Plan
June, 2017 through May, 2018**

Richmond County Station

	Unit 7	Unit 8	Unit ST4	Block Total
(A) MDC (mW)	189	189	175	553
(B) Period Hrs	8,760	8,760	8,760	8,760
(C) Net Generation (mWh)	1,243,399	1,232,496	1,400,360	3,876,255
(D) Capacity Factor (%)	75.10	74.44	91.35	80.02
(E) Net mWh Not Generated due to Full Scheduled Outages	124,472	127,635	116,973	369,080
(F) Scheduled Outages: percent of Period Hrs	7.52	7.71	7.63	7.62
(G) Net mWh Not Generated due to Partial Scheduled Outages	168,235	172,289	30,084	370,609
(H) Scheduled Derates: percent of Period Hrs	10.16	10.41	1.96	7.65
(I) Net mWh Not Generated due to Full Forced Outages	0	1,660	747	2,407
(J) Forced Outages: percent of Period Hrs	0.00	0.10	0.05	0.05
(K) Net mWh Not Generated due to Partial Forced Outages	0	0	0	0
(L) Forced Derates: percent of Period Hrs	0.00	0.00	0.00	0.00
(M) Net mWh Not Generated due to Economic Dispatch	119,534	121,560	0	225,930
(N) Economic Dispatch: percent of Period Hrs	7.22	7.34	0.00	4.66
(O) Net mWh Possible in Period	1,655,640	1,655,640	1,533,000	4,844,280
(P) Equivalent Availability (%)	82.32	81.78	90.36	84.68
(Q) Output Factor (%)	81.40	81.13	99.28	86.97
(R) Heat Rate (BTU/NkWh)	11,414	11,207	0	7,225

Notes:

- Units in commercial operation for the full month are presented. Pre-commercial or partial month commercial operations are not included.
- (R) Includes Light Off BTU's

**Duke Energy Progress
Base Load Power Plant
Performance Review Plan
June, 2017 through May, 2018**

Richmond County Station

	Unit 9	Unit 10	Unit ST5	Block Total
(A) MDC (mW)	215	215	248	678
(B) Period Hrs	8,760	8,760	8,760	8,760
(C) Net Generation (mWh)	1,408,644	1,430,970	1,891,473	4,731,087
(D) Capacity Factor (%)	74.85	76.04	87.07	79.70
(E) Net mWh Not Generated due to Full Scheduled Outages	179,383	173,853	206,807	560,044
(F) Scheduled Outages: percent of Period Hrs	9.53	9.24	9.52	9.43
(G) Net mWh Not Generated due to Partial Scheduled Outages	189,104	186,454	5,103	380,661
(H) Scheduled Derates: percent of Period Hrs	10.05	9.91	0.23	6.41
(I) Net mWh Not Generated due to Full Forced Outages	16,755	3,205	0	19,960
(J) Forced Outages: percent of Period Hrs	0.89	0.17	0.00	0.34
(K) Net mWh Not Generated due to Partial Forced Outages	0	0	1,582	1,582
(L) Forced Derates: percent of Period Hrs	0.00	0.00	0.07	0.03
(M) Net mWh Not Generated due to Economic Dispatch	88,000	87,404	67,514	242,917
(N) Economic Dispatch: percent of Period Hrs	4.68	4.64	3.11	4.09
(O) Net mWh Possible in Period	1,881,886	1,881,886	2,172,480	5,936,252
(P) Equivalent Availability (%)	79.53	80.69	90.17	83.79
(Q) Output Factor (%)	84.17	84.02	96.23	88.56
(R) Heat Rate (BTU/NkWh)	11,376	11,339	0	6,817

Notes:

- Units in commercial operation for the full month are presented. Pre-commercial or partial month commercial operations are not included.
- (R) Includes Light Off BTU's

**Duke Energy Progress
Base Load Power Plant
Performance Review Plan
June, 2017 through May, 2018**

Sutton Energy Complex

	Unit 1A	Unit 1B	Unit ST1	Block Total
(A) MDC (mW)	225	225	269	718
(B) Period Hrs	8,760	8,760	8,760	8,760
(C) Net Generation (mWh)	1,307,230	1,347,513	1,607,305	4,262,048
(D) Capacity Factor (%)	66.45	68.49	68.30	67.78
(E) Net mWh Not Generated due to Full Scheduled Outages	246,099	211,716	288,556	746,370
(F) Scheduled Outages: percent of Period Hrs	12.51	10.76	12.26	11.87
(G) Net mWh Not Generated due to Partial Scheduled Outages	241,300	236,395	54,636	532,331
(H) Scheduled Derates: percent of Period Hrs	12.27	12.02	2.32	8.47
(I) Net mWh Not Generated due to Full Forced Outages	23,501	32,624	4,922	61,047
(J) Forced Outages: percent of Period Hrs	1.19	1.66	0.21	0.97
(K) Net mWh Not Generated due to Partial Forced Outages	0	0	29,652	29,652
(L) Forced Derates: percent of Period Hrs	0.00	0.00	1.26	0.47
(M) Net mWh Not Generated due to Economic Dispatch	149,247	139,129	368,341	656,717
(N) Economic Dispatch: percent of Period Hrs	7.59	7.07	15.65	10.44
(O) Net mWh Possible in Period	1,967,377	1,967,377	2,353,412	6,288,166
(P) Equivalent Availability (%)	74.02	75.56	84.04	78.22
(Q) Output Factor (%)	78.23	79.01	78.08	78.42
(R) Heat Rate (BTU/NkWh)	11,446	11,372	0	7,106

Notes:

- Units in commercial operation for the full month are presented. Pre-commercial or partial month commercial operations are not included.
- (R) Includes Light Off BTU's

**Duke Energy Progress
Intermediate Power Plant
Performance Review Plan
June, 2017 through May, 2018**

Mayo Station

Units	Unit 1
(A) MDC (mW)	746
(B) Period Hrs	8,760
(C) Net Generation (mWh)	1,689,984
(D) Net mWh Possible in Period	6,534,960
(E) Equivalent Availability (%)	87.58
(F) Output Factor (%)	48.66
(G) Capacity Factor (%)	25.86

Notes:

- Units in commercial operation for the full month are presented. Pre-commercial or partial month commercial operations are not included.

**Duke Energy Progress
Intermediate Power Plant
Performance Review Plan
June, 2017 through May, 2018**

Roxboro Station

Units	Unit 2	Unit 3	Unit 4
(A) MDC (mW)	673	698	711
(B) Period Hrs	8,760	8,760	8,760
(C) Net Generation (mWh)	1,953,177	2,362,320	1,404,905
(D) Net mWh Possible in Period	5,895,480	6,114,480	6,228,360
(E) Equivalent Availability (%)	78.85	81.14	47.38
(F) Output Factor (%)	61.58	56.60	64.59
(G) Capacity Factor (%)	33.13	38.63	22.56

Notes:

- Units in commercial operation for the full month are presented. Pre-commercial or partial month commercial operations are not included.

Duke Energy Progress
Outages for 100 mW or Larger Units
May, 2018

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<u>Unit Name</u>	<u>Capacity Rating (mW)</u>	<u>Full Outage Hours</u>		<u>Total</u>
		<u>Scheduled</u>	<u>Unscheduled</u>	
Brunswick 1	938	0.00	0.00	0.00
Brunswick 2	932	0.00	0.00	0.00
Harris 1	932	237.65	0.00	237.65
Robinson 2	741	0.00	0.00	0.00

Duke Energy Progress
Outages for 100 mW or Larger Units
May 2018

Unit Name	Capacity Rating (mW)	Full Outage Hours		Total Outage Hours
		Scheduled	Unscheduled	
Asheville Steam 1	192	274.58	0.00	274.58
Asheville Steam 2	192	0.00	107.60	107.60
Asheville CT 3	185	0.00	0.00	0.00
Asheville CT 4	185	0.00	0.00	0.00
Darlington CT 12	133	11.00	102.00	113.00
Darlington CT 13	133	22.00	107.00	129.00
Lee Energy Complex CC 1A	225	0.00	40.40	40.40
Lee Energy Complex CC 1B	227	0.00	0.00	0.00
Lee Energy Complex CC 1C	228	0.00	0.00	0.00
Lee Energy Complex CC ST1	379	0.00	44.93	44.93
Mayo Steam 1	746	281.03	0.00	281.03
Richmond County CT 1	189	0.00	0.00	0.00
Richmond County CT 2	187	744.00	0.00	744.00
Richmond County CT 3	185	0.00	0.00	0.00
Richmond County CT 4	186	233.15	0.00	233.15
Richmond County CT 6	187	91.42	0.00	91.42
Richmond County CC 7	189	0.00	0.00	0.00
Richmond County CC 8	189	0.00	0.00	0.00
Richmond County CC ST4	175	0.00	0.00	0.00
Richmond County CC 9	216	0.00	6.02	6.02
Richmond County CC 10	216	0.00	0.00	0.00
Richmond County CC ST5	248	0.00	0.00	0.00

Notes:

- Units in commercial operation for the full month are presented. Pre-commercial or partial month commercial operations are not included.

Duke Energy Progress
Outages for 100 mW or Larger Units
May 2018

Unit Name	Capacity Rating (mW)	Full Outage Hours		Total Outage Hours
		Scheduled	Unscheduled	
Roxboro Steam 1	380	184.00	0.00	184.00
Roxboro Steam 2	673	38.50	0.00	38.50
Roxboro Steam 3	698	421.00	0.00	421.00
Roxboro Steam 4	711	744.00	0.00	744.00
Sutton Energy Complex CC 1A	224	370.57	0.00	370.57
Sutton Energy Complex CC 1B	224	394.82	0.00	394.82
Sutton Energy Complex CC ST1	271	478.92	0.00	478.92
Wayne County CT 10	192	0.00	0.00	0.00
Wayne County CT 11	192	0.00	0.00	0.00
Wayne County CT 12	193	88.00	0.00	88.00
Wayne County CT 13	191	0.00	0.00	0.00
Wayne County CT 14	195	0.00	0.00	0.00

Notes:

- Units in commercial operation for the full month are presented. Pre-commercial or partial month commercial operations are not included.